

## And Then it Rained

The mission appeared simple enough as I read the list a second time. A drizzle grayed the light filtering through the small basement windows of the Inventory & Monitoring Aquatic Office. Fly to Guam for a day, calibrate some instruments, then head to Saipan and train the new Resource Chief on Groundwater and Water Quality Monitoring in American Memorial Park. All the while, actively collecting water samples, setting up instruments for counting bacteria in the water, and training park staff. Two days were reserved to accomplish that. There may even be time for a stop at my favorite Vietnamese restaurant for dinner. After that assignment, I was to head back to Guam, and begin stream monitoring in earnest. The plan included sixteen monitoring sites in ten days; sampling along the scenic Asan River in War in the Pacific National Historical Park. Thrown in the mix was a day off for rest and a day to set up bacteria counting instruments. Another day was scheduled to meet with USGS scientists to establish sites along the Asan River for a stream rating curve to understand stream discharge. What could be better? Diving! That was on the mission list as well. I was to work with national park staff in Guam to get them approved to conduct their own scientific diving research. This was shaping up to be an excellent mission. The last task on the mission list was to meet a pair of experts flying in from halfway around the world, and spend a week with them working on developing a stream animal identification guide for the island. Who wouldn't want to spend time with that kind of brain power? We would fly in January.

The jet lifted off into the clear blue sky, engines humming in the background, speeding me at 540 miles per hour towards the Mariana Islands in the Western Pacific. The landing was smooth, but the blackness of the night had a foreboding feel that haunted me worse than the heat and humidity in the air which stuck to my skin and drained my last remaining bits of energy... Morning struck sooner than desired. 7:00 am Hawaii time was 3:00 am Guam time, and no amount of effort could force me back to sleep. It was time to work. Locating gear and conducting calibrations took all day, but by 7:00 pm we had finished and were prepared for the next morning's flight to Saipan. Travel there was uneventful, and the cool blue ocean sparkled as the islands of Rota and Tinian, and their fringing coral reefs, slipped beneath us in silence.

Then the trouble began. At the first monitoring site on Saipan the groundwater probe had failed. Then several water quality sites were dry. Then an extended deployment instrument was lost under a sea of water hyacinth. Not a good couple of days. The minutes spent rectifying each situation stretched into hours. The precious moments of sleep refused to rest the wearied souls of all who participated. A frantic drive back to the airport to make the last flight of the night found us without our documentation camera and no time to look for it. We returned to Guam, happy with the successes that we had, but troubled by the equipment failure and loss.

Guam didn't turn out much better. The rains started to come and the streams started flooding. The Asan River became unsafe to work in, so we had to divert more precious time to secondary objectives developed for such situations. The stream receded and we started work until we had to meet the USGS scientists. We made it to the first site

safely, but at the next site the stream started flooding again. The river rose so quickly that within minutes the stream had gone from dry rocks to low calf level and it was still rising. We slogged our way back through brush and thick mud bogs created by the erosion from a development above the park. We bided our time with more secondary objectives. The river dropped and we recommenced our monitoring. Our GPS unit failed, and we had to briefly resort to topography maps to identify locations. Swordgrass cut and sliced our hands and faces and skin. Not many days went by until we were hampered by flooding again. Diving was rescheduled, and the weekends were booked.

The staff of War in the Pacific NHP valiantly pitched in to help. Even the Administrative Assistant was in the stream with mask and snorkel, slithering to and fro, cold and wet, searching for snails and shrimp so that we might be able to complete our efforts to monitor the freshwater animals of the national park.

Still the rains kept coming. We did everything we could to alter our schedule and work on the intermittent sunny days, garnering help from every corner of the island. The Navy sent 10 people to assist us. These young men worked hard to help us press forward in our efforts. Slowly but surely, the sites seemed to melt away into the completed pile. But, before we could finish, the experts from the other side of the world showed up. We divided our efforts, but on the day they arrived the rains came again and flooded us out of the streams we were supposed to be working in. The next day was no better than the first. Try as we might, we couldn't find a stream on the island that wasn't flooding. We headed for the safety of the caves.

And then it hit me. There I was, soaking wet, muddy, cold and deep within a cave on the island of Guam, half a globe from home, cheering that we had just caught a crab. It was a long way from the deserts of Arizona where I was raised. If only Mom could see me now.

Perseverance paid off with our first glimmers of hope. We received word that the camera we'd lost on Saipan had been found. Then, the sunlight broke through and the Navy sent 10 more brave young soldiers to help us with our last push efforts to succeed. And we did. We finished the sampling and took the national park staff for their science diving checkout. We packed water samples, and finished the last of our work, hours before our plane left for Hawaii. And there we were; waiting for the plane; exhausted. Only 3 days off in almost a month of working 7 am to 7 pm. But, the project was complete. The mission was successful. And the plane, well, the plane slipped into oblivion as I lost consciousness minutes after we departed. The emerald green of the Big Island greeted me when I awoke, and beckoned me home.

- T. Jones, Aquatic Ecologist